# Louisiana Yams







The Louisiana yam is an exceptional type of sweet potato bred to have a soft, moist flesh, to be sweet and flavorful and very high in beta-carotene or vitamin A value. The successful golden yams are the product of extensive research programs conducted by Experiment Station scientists of the Louisiana State University Agricultural Center.

Yams have been part of the landscape of Louisiana for more than 200 years, but it was not until 1937 that they began to be marketed nationally. Much of the creation of the Louisiana yam industry can be credited to an outstanding scientist, the late Dr. Julian C. Miller, and his colleagues in the horticulture department of Louisiana State University. They chose to call this moist-flesh sweet potato the Louisiana yam to distinguish it from the many other sweet potato varieties grown elsewhere at that time.

Research efforts have continued, and several important varieties have been developed through cooperative efforts of scientists and Extension personnel of the LSU Agricultural Center with cooperation from producers and the Louisiana yam industry.

Now the Beauregard variety accounts for almost 100 percent of the sweet potato production in Louisiana. The economic importance of Louisiana yams is noted by their nationwide distribution. They are available fresh, frozen and canned.

Yams are one of nature's most nutritious root crops and are among the most versatile of all foods. They can be prepared in dozens of ways, but are especially popular when baked and served hot with a little margarine, or with gumbo in South Louisiana. Yams may also be boiled, candied, stuffed, fried, mashed or whipped. They may be seasoned with sugar and spices or fruits, and included in casseroles and pies or served in orange shells. They combine well with meats for main dishes, make tasty cakes and pones and nutritious breads, muffins and cookies. They can even be used in soup or made into candy!



#### Selection

**Fresh** Choose smooth, plump, bright, dry and clean potatoes. Do not refrigerate, but store in a cool place (60 F) where air can circulate freely. Sort the potatoes often, and remove any with signs of spoilage.

Uncured Freshly dug yams that reach the market in late summer and early fall are uncured. They spoil easily and should be used promptly. They are good cooked by any method except baking. Freshly harvested yams must be held for six to eight weeks before they will bake successfully. Store at 60 degrees F or warmer with a high humidity and good air circulation. During this time (called curing), the starch is converted to sugar, making them sweet and moist. Commercially, they are kiln dried. Cured or kiln-dried yams come to the market in late fall just before Thanksgiving. They may be prepared in any manner.

Frozen yams are available in slices, halves or patties. Directions for their use are on the label. Canned yams are available in several styles -- whole, pieces, mashed and with fruit. Whole or cut yams are packed in syrup. Some are vacuum packed without syrup, and there are lighter styles which have less sugar. Read the label to choose the style, amount, and brand or grade. Store canned yams in a cool place.

## **Nutritional Value**

Nutritionally, the yam is an exceptional vegetable. It is a complex carbohydrate rich in the antioxidant vitamins, beta-carotene and vitamin C. One medium-sized yam (about 6 ounces) contains:

- ▶ about 150 calories, so they are called a high-energy food. One tablespoon of butter or margarine adds 100 calories; one ounce of marshmallows adds 90 calories.
- ▶ three or four times the recommended daily allowance of carotene for vitamin A. (Vitamin A is found only in animal foods, and about two-thirds of the beta-carotene becomes vitamin A inside the body);
- ▶ about half the daily recommended amount of vitamin C if cooked in the skin;
- ▶ beneficial amounts of other vitamins, minerals and dietary fiber; and only a trace of fat and no cholesterol.

The deeper the pretty, bright orange color in yams, the richer they are in betacarotene.

# Yams, Antioxidants and Cancer Prevention

New research links antioxidants like beta-carotene, vitamin C and vitamin E with a reduced risk for certain cancers. These nutrients may help fight free radicals, which have been blamed for causing cancer, heart disease, cataracts and other illnesses, as well as the aging process. Free radicals are highly reactive, unstable molecules that can injure healthy cells. They are produced in the body by exposure to sunlight, radiation, environmental pollutants and tobacco smoke, as well as by certain body processes. Cells use antioxidant systems to repair and prevent free radical damage. Some antioxidants are made by the body cells, and others come in the foods we eat.

Sweet potatoes are an exceptionally rich source of beta-carotene and a good source of vitamin C if cooked in the skin. Until the 1980s, we thought beta-carotene was important only because it was converted into vitamin A inside the body.

Vitamin A is a fat-soluble vitamin and comes preformed from animal sources. It is essential for proper growth and development, for reproduction, for healthy eyes and normal vision, for healthy skin and for protection against infections.

New research tells us foods rich in vitamin A, along with beta-carotene, seem to be protective against cancers of the lungs, throat, esophagus and bladder. And diets low in these foods may actually increase the risk of lung cancer.

About one-third of the beta-carotene in foods is not converted to vitamin A, but is absorbed unchanged. Studies in recent years have consistently shown that it is a high intake of carotene-rich fruits and vegetables, rather than vitamin A itself, which decreases the risk of lung cancer and may decrease the risk of cancers in the mouth, throat, esophagus and stomach.

Research has also shown that beta-carotene reduces the risk of heart attacks, especially in men who already have clogged arteries.

Studies strongly indicate that vitamin C also helps prevent certain cancers. One of the ways vitamin C works is to prevent the formation of nitrosamines, which are known to cause cancer. Nitrosamines are formed when nitrates and nitrites in foods (such as in cured meats) react with proteins.

#### Remember

- ▶ Louisiana yams are an exceptional type of sweet potato, especially the Beauregard variety.
- Do not store fresh yams in the refrigerator or below 50°F.
- > Fresh, uncured yams cannot be successfully baked.



- ▶ Cured yams reach the market just before Thanksgiving.
- Do not wrap fresh yams with foil when baking.
- ▶ When wrapped in foil, yams are steamed, not baked. They will not be syrupy and will not have the sweet, distinctive flavor of uncovered yams baked in a conventional oven.
- ▶ Boil canned potatoes in syrup until most liquid evaporates, then use in recipe. This improves flavor; saves nutrients.
- Yams may be cooked, but not baked, in the microwave oven; that is, they won't have the sweet, syrupy flavor of oven-baked yams.
- ▶ Bake a large pan of sweet potatoes. This will save energy. Cool, package and freeze. They are easy to reheat, especially in the microwave, and will taste freshly baked.
- ➤ Most potato dishes freeze well.

## Use Versatile Yams in Healthier Meals

#### Baked Yams **≡**

Scrub, trim and dry well. Rub lightly with fat or oil. Arrange on baking sheet. Preheat oven to 400°F, (moderately hot). Bake for 15 minutes, reduce temperature to 375°F, and bake medium size potatoes about 1 1/2 hours, or until soft. Large potatoes may require longer. Fresh uncured potatoes will not bake successfully. One 5" x 2" sweet potato has 160 calories, 2 g. protein, 25,750 IU or 2575 RE of vitamin A and 26 mg. of vitamin C.

Note: Bake a large panful at one time. Freeze and reheat when ready to use.

#### Sweet Potato Pie

2 cups mashed cooked or canned yams 1 teaspoon allspice
2 tablespoons lowfat margarine 2 eggs, slightly beaten
3/4 cup sugar 1 cup skim milk
(if canned in syrup, use 1/2 c. sugar) 2/3 cup evaporated skim milk
1/2 teaspoon salt 1 teaspoon vanilla
1/2 teaspoon cinnamon 1 plain pastry shell
1/2 teaspoon ginger 3 tablespoons chopped pecans, optional

Cook sweet potatoes, or heat canned potatoes in syrup until most of the liquid has evaporated.



Beat potatoes with mixer, if available. Thoroughly mix in margarine, sugar, salt, spices. Add eggs, milk, evaporated milk, vanilla; mix well. Do not scrape beaters. Pour into 9-inch pastry-lined pie pan (have edges crimped high). Sprinkle pecans on top. Bake in hot oven at 425°F for 10 minutes. Reduce temperature to 350°F, and bake 25-30 minutes longer, or until firm around edges, but still a little soft in center. Center will get firm as pie cools. Especially good with pecans. Serves 8. Each serving provides: 319 calories, 13.5 grams of fat, 49.9 grams of carbohydrates, 296 mg. sodium and 1067 RE of vitamin A.

Variation: Place pie mixture in a casserole dish or in orange cups and bake at 350 degrees F. Top with marshmallows and run under broiler.

#### Fruited Yam Cups =

8 oranges

6 medium sweet potatoes (or 2-pound can)

1/2 stick lowfat margarine

1/2 cup sugar

1/2 cup orange juice

I small can crushed pineapple, canned in own juice

I small bottle maraschino cherries, chopped

1/4 cup cherry juice

1 teaspoon vanilla

1/2 teaspoon almond flavoring

1/4 teaspoon salt

1/4 cup chopped pecans

Small marshmallows

Cut oranges in half. Juice, saving part of juice for potatoes. Remove pulp and white membrane by scraping with spoon. Scallop or flute edges with scissors. Bake or boil yams, or heat canned yams. Remove skins while hot, and mash. Add margarine, sugar, orange and cherry juices and beat well. Do not scrape beaters; the fibers have matted together on the beaters. Fold in pineapple and juice, cherries, flavorings, salt and pecans. Fill orange cups with potato mixture. Top each with 5 marshmallows. Put in hot oven or run under broiler to brown marshmallows. 16 servings. Each serving provides 135 calories, 4 grams fat, 24.8 grams carbohydrates and 946 RE vitamin A.



**Note:** Orange shells may be prepared ahead and stored in refrigerator in plastic bag. Potato mixture may be prepared ahead, or even frozen. Reheat, then fill orange cups.

## Sweet Potato-Apple Bisque with Sage Cream (Best of Show

Yamfest, Winnsboro, 1995) **≡** 

- 2 tablespoons light margarine
- 2 cups chopped onions
- 2 teaspoons minced garlic
- 3 large sweet potatoes, peeled and cut into chunks
- 4 large apples, peeled and sliced
- 4 cups chicken broth
- 1 tablespoon sage
- 1/4 teaspoon pepper

Cook onions and garlic in margarine over medium heat until onions are yellow (about 5 minutes). Add potatoes and apples, cook about 3 minutes, stirring occasionally. Add broth and seasonings, bring to a boil, cover and simmer on low heat for about 30 minutes. Puree' mixture in blender or food processor. Serve hot with a dollop of sage cream; recipe follows. 12 servings. Each serving provides: 108 calories, 3.5 grams fat, 17 grams carbohydrate, 341 mg. sodium and 624 RE vitamin A.

#### Sage Cream =

1/2 cup sour cream (lowfat)

1 teaspoon sage

I tablespoon apple juice

1/4 teaspoon each salt and pepper

Mix and drizzle over hot soup.

# Louisiana Yam Ring

An Unusual and Delicious Supper Dish

8 medium Louisiana yams, cooked and peeled

1/2 cup lowfat milk

1 teaspoon salt

Dash of pepper



1/4 cup margarine, softened

3/4 cup firmly packed dark brown sugar

1/4 cup chopped pecans

Mash hot yams in large bowl with milk, salt and pepper and half the margarine. Spread remaining margarine (2 tablespoons) over bottom and sides of 6 1/2 cup ring mold. Spread brown sugar over bottom and sides of mold, pressing lightly. Sprinkle nuts over bottom. Spoon mashed yams into mold; spread evenly. Bake uncovered at 350 degrees for 15 minutes. Cover with foil; bake 10 minutes longer. Unmold onto serving plate. Fill center with creamed ham or chicken; garnish with parsley. 8 servings. Each serving provides: 247 calories, 5.3 grams fat, 49 grams carbohydrate, 507 mg. sodium and 2518 RE vitamin A.

# Fat-Free Sweet Potato (or Carrot) Muffins

2 1/4 cups all-purpose flour

1/2 cup sugar

1/3 cup light brown sugar

1 teaspoon cinnamon

1/4 teaspoon ginger

1 teaspoon salt

I teaspoon baking powder

1/2 teaspoon baking soda

1 1/2 cups shredded sweet potatoes

1/2 cup raisins

1-8 ounce carton nonfat vanilla yogurt

1/2 cup nonfat egg substitute

1 teaspoon vanilla

I teaspoon confectioners sugar (dust on top after baking)

Sift dry ingredients. Fold in grated sweet potatoes and raisins. Mix yogurt, egg substitute and vanilla. Mix lightly with dry ingredients. Spray muffin tins with no-stick cooking spray and fill 2/3 full of batter. Bake at 400 degrees for about 20 minutes or until done. Makes about 1-1/2 dozen or bake in loaf pan (4 1/2 " x 8 1/2 ") about 50 minutes at 350 degrees F. Each muffin provides: 146 calories, 32 grams of carbohydrates and 188 milligrams of sodium.



# Praline-Topped Yams =

3 cups cooked, mashed sweet potatoes

1/2 cup sugar

1/2 stick lowfat margarine

2 eggs, beaten (or egg substitute)

1/2 cup raisins (optional)

1 teaspoon vanilla

Whip potatoes while hot. Add remaining ingredients; mix well. Pour into greased casserole dish. Top with following mixture and bake at 350 degrees F for 20-25 minutes. Freezes well. 8 servings. Each serving provides: 444 calories, 12 grams fat, 53 milligrams cholesterol, 83 grams carbohydrate, 171 mg. sodium and 2122 RE vitamin A.

## Topping:

1 cup brown sugar

1/2 cup flour

1/2 stick lowfat margarine, melted

1/2 cup chopped pecans

Combine all ingredients; place on top of potatoes and bake.

#### Betty Bagent's Candied Yams

6 medium yams

1 1/2 cups sugar

1 1/2 teaspoons cinnamon

1 1/2 tablespoons flour

1/2 teaspoon salt

1 stick margarine (lower fat)

1 lemon, sliced

1/3 cup water

1/2 cup chopped pecans (optional)

Wash potatoes, peel and cut into circular slices about 2 inches long (about 3 per potato). Precook in a little water until barely tender. Or, cover whole unpeeled potatoes with water and parboil until barely fork tender (about 15 to 20 minutes). Cool, peel and cut into 2-inch pieces. Arrange pieces in a greased baking dish about 13" x 9".



Mix sugar, cinnamon, flour and salt. Sprinkle evenly over potatoes. Dot with margarine. Twist lemon slices over potatoes, then arrange peels diagonally across potatoes. Pour water evenly over potatoes. Add chopped pecans if desired. Bake in 400 degrees F oven until syrup is thick (about 35 to 45 minutes). Baste occasionally with the syrup. Yield: 18 pieces. Each piece (without nuts) provides: 148 calories, 15 grams carbohydrate, 2.5 grams fat, no cholesterol, 103 mg. sodium, 1266 RE vitamin A and 16 mg. vitamin C.

#### Yams Facts We Bet You Didn't Know

- The yam (sweet potato) is the basis of one of Louisiana's important agricultural industries.
- ▶ The farm value of yams is an estimated \$50 million. This generates more than \$100 million to the state's economy.
- ▶ About 22,000 acres of yams are grown in the state.
- Louisiana supplies about 30% of all the yams consumed annually in the United States.
- ➤ The major yam-producing parishes are West Carroll, Avoyelles, Morehouse, Franklin, St. Landry, Evangeline, St. Martin, West Feliciana, Acadia, Grant, Rapides and Bienville, ranked in order of acreage.
- ➤ There are two yam processors and about 30 fresh market shippers in the state.
- ▶ About 50% of the Louisiana yam crop is processed, and 50% goes to the fresh market.
- ▶ Beauregard is now the predominant variety grown in Louisiana and is an excellent variety for baking.
- ➤ A rigid quality control program and grading system have created trade confidence in Louisiana's fresh yams. The high quality yams bring premium prices over sweet potatoes produced in other states in nearly all markets throughout the United States.



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